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1 7. The method according to claim 1 wherein the monitoring step comprises the  
2 substeps of:

3           measuring a number of observations of different propagational delays  
4   within a measurement range during an uplink transmission of the subscriber  
5   station;

6       measuring a number of antenna observations of receive signals, of the  
7       uplink transmission, detected on each distinct uplink antenna of a base station;

8        incrementing antenna set counters and counter bins associated with the  
9        corresponding observations in a first histogram of propagational delays and in a  
10       second histogram of antenna observations, respectively, to form the operational  
11       composite fingerprint for comparison to the characteristic composite fingerprint.

1 8. The method according to claim 7 wherein the monitoring step further comprises  
2 the substep of normalizing the first and second histograms.

1 9. The method according to claim 7 wherein the monitoring step further includes  
2 the substeps of:

3 determining a reference range about a central propagational delay factor  
4 associated with a corresponding strongest reverse channel signal strength for the  
5 subscriber station for propagational delays observed at a beginning of the uplink  
6 transmission; and

7 establishing a smaller component counter and a larger component counter  
8 to track measured propagational delays that fall outside of a reference range to  
9 form the operational composite fingerprint for comparison to the characteristic  
10 composite fingerprint.

1 10. The method according to claim 7 further comprising making the observations  
2 based upon signal characteristics of mature finger assignments.

1 11. The method according to claim 7 further comprising attaining the observations  
2 from a signal searcher.

1 17. The method according to claim 1 wherein the comparing step further  
2 comprises determining that the subscriber station is operating in the restricted  
3 area if a first statistical representation of measured propagational delay factors  
4 falls outside of a range defined by a propagational delay mask or if a second

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1 18. A system for monitoring whether a subscriber station is operating in an  
2 authorized area, the system comprising:

5 a processor for comparing the operational composite fingerprint to a  
6 characteristic composite fingerprint to determine if the subscriber station is  
7 operating within the authorized area.

1 20. The system according to claim 18 wherein the monitor comprises an antenna  
2 monitor for monitoring the number of temporally offset receive signals, originating  
3 from a transmission of the subscriber station, incident upon each distinct uplink  
4 antenna set of a base station.

21. The system according to claim 18 wherein the monitor comprises a  
propagational delay measurer for measuring the propagational delays of  
temporally offset receive signals originating from a transmission of the subscriber  
station.

22. The system according to claim 18 wherein the characteristic composite fingerprint includes a first histogram of observations of propagational delays associated with a reverse link transmission of the subscriber station from the authorized area.

1 23. The system according to claim 22 wherein the characteristic composite  
2 fingerprint includes a second histogram of antenna observations per antenna or

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24. The system according to claim 18 wherein the characteristic composite fingerprint includes a probability density function of probability versus propagational delays associated with a reverse link transmission of the subscriber station from the authorized area.

1 25. The system according to claim 18 wherein the characteristic composite  
2 fingerprint includes propagational delay factors based on time difference between  
3 a reference pseudo-random code and a received pseudo-random code, wherein  
4 the subscriber station transmits on a reverse channel using the reference pseudo-  
5 random code.

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